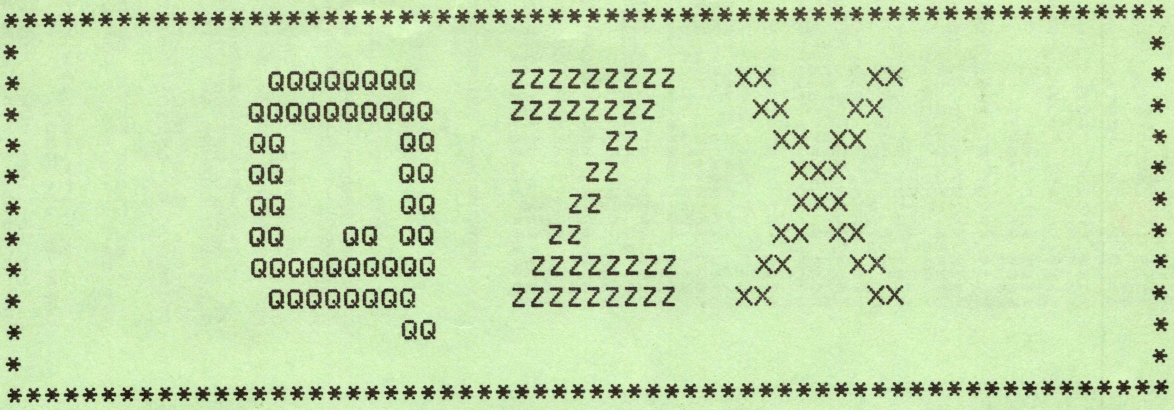
QQQQQQQ ZZZZZZZZZ XX XX
QQQQQQQQQQ ZZZZZZZZ XX XX
QQ QQ ZZ XX XX
QQ QQ ZZ XXX
QQ QQ ZZ XXX
QQ QQ QQ ZZ XX XX
QQQQQQQQQQ ZZZZZZZZ XX XX
QQQQQQQ ZZZZZZZZZ XX XX
QQ

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Alex F. Burr,K5XY
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Ambrose 'Bo' Barry,W4GHV/5
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N O T I C E

Your mailing label now includes the expiration date of your QZX subscription. For example, the labels having 12/83 expired last month, and we are sending you this (FINAL) extra issue in hopes of getting your renewal immediately! We need and appreciate your continued support.

LISTING FOR "USACA TOTALS"

```
  2 LET B$="
  5 GOTO 100
 10 IF LEN Z$=1 THEN LET Z$=Z$+
"
 11 IF LEN Z$=2 THEN LET Z$=Z$+
"
 12 IF LEN Z$=3 THEN LET Z$=Z$+
"
 13 IF LEN Z$=4 THEN LET Z$=Z$+
"
 14 IF LEN Z$=5 THEN LET Z$=Z$+
"
 15 IF LEN Z$=6 THEN LET Z$=Z$+
"
 16 IF LEN Z$=7 THEN LET Z$=Z$+
"
 17 IF LEN Z$=8 THEN LET Z$=Z$+
"
 18 IF LEN Z$=9 THEN LET Z$=Z$+
"
 19 IF LEN Z$=10 THEN LET Z$=Z$
+"
 20 IF LEN Z$=11 THEN LET Z$=Z$
+"
 21 IF LEN Z$=12 THEN LET Z$=Z$
+"
 22 IF LEN Z$=13 THEN LET Z$=Z$
+"
 23 IF LEN Z$=14 THEN LET Z$=Z$
+"
 25 RETURN
 30 PRINT AT 20,0;"PRESS [ENTER]
TO RETURN TO MENU"
 31 INPUT A$
 32 GOTO 100
 35 PRINT AT 20,0;"DO YOU WISH
ANOTHER CHANGE?"
 36 LET A$=INKEY$
 37 IF A$="" THEN GOTO 36
 38 IF A$="Y" THEN RETURN
 39 IF A$="N" THEN GOTO 100
 40 GOTO 36
 50 DIM S$(50,15)
 51 DIM U(50)
 52 DIM C(50)
 53 DIM M(50)
 54 DIM F(50)
 55 GOTO 1020
100 REM **MENU
105 CLS
110 PRINT AT 0,0;"-TOTALS FOR-"
;AT 1,4;"[REVERSE: ON]  *********
;AT 2,4;"*  UNITED  STATES  *"
;AT 3,4;"*  COUNTY HUNTERS AWARD *"
;AT 4,4;"*  PROGRAM  *"
;AT 5,4;"[REVERSE: OFF]  *********
"
115 PRINT AT 7,13;"MENU";AT 9,3
;"1) INITIAL INFORMATION";AT 10,
3;"2) CHECK INDIVIDUAL STATE";AT
11,3;"   (INCLUDING CHANGE OPTI
ON)";AT 12,3;"3) PRINT ALL STATE
 TOTALS";AT 13,3;"4) CHECK TOTAL
 OF ALL STATES";AT 14,3;"5) EXIT
 THE PROGRAM"
120 PRINT AT 20,0;"ENTER YOUR C
HOICE 1-5."
121 LET A$=INKEY$
122 IF A$="" THEN GOTO 121
123 IF A$="1" THEN GOTO 1000
124 IF A$="2" THEN GOTO 2000
125 IF A$="3" THEN GOTO 3000
126 IF A$="4" THEN GOTO 4000
127 IF A$="5" THEN GOTO 5000
128 GOTO 121
1000 REM **INITIAL INFORMATION
1005 CLS
1010 PRINT AT 11,9;"ARE YOU SURE
?"
1015 LET A$=INKEY$
1016 IF A$="" THEN GOTO 1015
1017 IF A$="Y" THEN GOTO 50
1018 IF A$="N" THEN GOTO 100
1019 GOTO 1018
1020 CLS
1025 FOR X=1 TO 50
1030 PRINT "STATE? ";
1035 INPUT Z$
1040 PRINT Z$
1045 LET S$(X)=Z$
1050 PRINT
1055 PRINT "TOTAL COUNTIES WORKE
D? ";
1060 INPUT Z
1065 PRINT Z
1070 LET U(X)=Z
1075 PRINT "TOTAL COUNTIES CONFI
RMED? ";
1080 INPUT Z
1085 PRINT Z
1090 LET C(X)=Z
1095 PRINT "TOTAL MOBILE CONTACT
S? ";
1100 INPUT Z
1105 PRINT Z
1110 LET M(X)=Z
1115 PRINT "TOTAL FIXED CONTACTS
? ";
1120 INPUT Z
1125 PRINT Z
1130 LET F(X)=Z
1135 CLS
1140 NEXT X
1145 GOTO 100
2000 REM **SEARCH AND CHANGE
2005 CLS
2010 PRINT "STATE?"
2015 INPUT Z$
2017 FAST
2020 GOSUB 10
2025 FOR X=1 TO 50
2030 IF Z$=S$(X) THEN GOTO 2050
2035 NEXT X
2037 SLOW
2040 PRINT "SORRY-THAT SPELLING
IS NOT FOUND"
2045 GOTO 30
2050 CLS
2053 SLOW
2055 PRINT "[REVERSE: ON] STATE -
[REVERSE: OFF] ";S$(X)
2060 PRINT
2065 PRINT "[REVERSE: ON] COUNTIES WORKED
[REVERSE: OFF] ";U(X)
2070 PRINT "[REVERSE: ON] COUNTIES CONFIRMED
[REVERSE: OFF] ";C(X)
2075 PRINT "[REVERSE: ON] MOBILE CONTACTS
[REVERSE: OFF] ";M(X)
2080 PRINT "[REVERSE: ON] FIXED CONTACTS
[REVERSE: OFF] ";F(X)
2085 PRINT AT 13,0;"DO YOU WISH
TO CHANGE ANY DATA?"
2086 LET A$=INKEY$
2087 IF A$="" THEN GOTO 2086
2088 IF A$="Y" THEN GOTO 2095
2089 IF A$="N" THEN GOTO 30
2090 GOTO 2086
2095 PRINT AT 13,0;B$
2100 PRINT AT 13,0;"DO YOU WISH
TO CHANGE:";AT 14,4;"1) WORKED";
AT 15,4;"2) CONFIRMED";AT 16,4;"
3) MOBILE";AT 17,4;"4) FIXED"
2105 PRINT AT 20,0;"ENTER YOU CH
OICE 1-4."
2110 LET A$=INKEY$
2111 IF A$="" THEN GOTO 2110
2112 IF A$="1" THEN GOTO 2120
2113 IF A$="2" THEN GOTO 2130
2114 IF A$="3" THEN GOTO 2140
2115 IF A$="4" THEN GOTO 2150
2116 GOTO 2110
2120 PRINT AT 13,0;B$;AT 14,0;B$
;AT 15,0;B$;AT 16,0;B$;AT 17,0;B
$;AT 20,0;B$
2121 PRINT AT 13,0;"YOU WISH TO
CHANGE THE WORKED","TOTAL FROM "
;U(X);" TO ";
2122 INPUT Z
2123 PRINT Z
2124 LET U(X)=Z
2125 GOSUB 35
2126 GOTO 2050
2130 PRINT AT 13,0;B$;AT 14,0;B$
;AT 15,0;B$;AT 16,0;B$;AT 17,0;B
$;AT 20,0;B$
2131 PRINT AT 13,0;"YOU WISH TO
CHANGE THE CONFIAMEDTOTAL FROM "
;C(X);" TO ";
2132 INPUT Z
2133 PRINT Z
2134 LET C(X)=Z
2135 GOSUB 35
2136 GOTO 2050
2140 PRINT AT 13,0;B$;AT 14,0;B$
;AT 15,0;B$;AT 16,0;B$;AT 17,0;B
$;AT 20,0;B$
2141 PRINT AT 13,0;"YOU WISH TO
CHANGE THE MOBILES","TOTAL FROM
";M(X);" TO ";
2142 INPUT Z
2143 PRINT Z
2144 LET M(X)=Z
2145 GOSUB 35
2146 GOTO 2050
2150 PRINT AT 13,0;B$;AT 14,0;B$
;AT 15,0;B$;AT 16,0;B$;AT 17,0;B
$;AT 20,0;B$
2151 PRINT AT 13,0;"YOU WISH TO
CHANGE THE FIXED","TOTAL FROM ";
F(X);" TO ";
2152 INPUT Z
2153 PRINT Z
2154 LET F(X)=Z
2155 GOSUB 35
2156 GOTO 2050
3000 REM **PRINT STATE TOTALS
3005 CLS
3007 FAST
3010 FOR X=1 TO 50
3015 LPRINT "------------------
-------------"
3020 LPRINT S$(X);" COUNTIES TOT
ALS"
3025 LPRINT
3030 LPRINT "WORKED-";U(X),"CONF
IRMED-";C(X)
3035 LPRINT "MOBILES-";M(X),"FIX
ED-";F(X)
3040 NEXT X
3045 GOTO 4000
4000 REM **GRAND TOTALS
4003 CLS
4005 FAST
4010 LET UU=0
4015 LET CC=0
4020 LET MM=0
4025 LET FF=0
4030 FOR X=1 TO 50
4035 LET UU=UU+U(X)
4040 LET CC=CC+C(X)
4045 LET MM=MM+M(X)
4050 LET FF=FF+F(X)
4055 NEXT X
4057 SLOW
4060 PRINT "**TOTALS FOR ALL UNI
TED STATES**"
4065 PRINT
4070 PRINT "[REVERSE: ON] TOTAL STATES - [REVERSE: OFF] 50"
4075 PRINT "[REVERSE: ON] TOTAL COUNTIES - [REVERSE: OFF] 3
,076"
4080 PRINT
4085 PRINT "[REVERSE: ON] COUNTIES WORKED
[REVERSE: OFF] ";UU
4090 PRINT "[REVERSE: ON] COUNTIES CONFIRMED
[REVERSE: OFF] ";CC
4095 PRINT "[REVERSE: ON] MOBILE CONTACTS
[REVERSE: OFF] ";MM
4100 PRINT "[REVERSE: ON] FIXED CONTACTS
[REVERSE: OFF] ";FF
4105 PRINT AT 20,0;"PRESS [P] TO P
RINT OR [R] TO RETURN."
4106 LET A$=INKEY$
4107 IF A$="" THEN GOTO 4106
4108 IF A$="P" THEN GOTO 4150
4109 IF A$="R" THEN GOTO 100
4110 GOTO 4106
4150 REM **PRINT GRAND TOTALS
4155 LPRINT "==================
=============="
4160 LPRINT "TOTAL STATES-50"
4165 LPRINT "TOTAL COUNTIES-3,07
6"
4170 LPRINT
4175 LPRINT "TOTAL COUNTIES WORK
ED-";UU
4180 LPRINT "TOTAL COUNTIES CONF
IRMED-";CC
4185 LPRINT "TOTAL MOBILE CONTAC
TS-";MM
4190 LPRINT "TOTAL FIXED CONTACT
S-";FF
4195 GOTO 100
5000 REM **EXIT
5005 CLS
5010 PRINT AT 1,8;"[REVERSE: ON] EXIT PROGRAM
[REVERSE: OFF]"
5015 PRINT AT 3,0;"IF YOU HAVE E
NTERED NEW DATA OR","CHANGED ANY
 DATA, THIS PROGRAM","MUST BE SA
VED TO TAPE."
5020 PRINT AT 7,0;"IF YOU WISH T
O SAVE THE PROGRAM","AND DATA TH
EN ENTER [S]."
5025 PRINT AT 10,0;"IF YOU WISH
TO RETURN TO THE","MENU WITHOUT
ANY DATA LOSS","ENTER [R]."
5030 PRINT AT 14,0;"IF YOU WISH
SIMPLY TO EXIT THE","PROGRAM, PR
ESS [Q]."
5035 PRINT AT 18,0;"ENTER YOUR C
OMMAND."
5040 LET A$=INKEY$
5041 IF A$="" THEN GOTO 5040
5042 IF A$="S" THEN GOTO 5050
5043 IF A$="R" THEN GOTO 100
5044 IF A$="Q" THEN STOP
5045 GOTO 5040
5050 CLS
5055 PRINT AT 10,10;"START TAPE"
;AT 12,10;"PRESS [ENTER]"
5060 INPUT A$
5065 CLS
5070 SAVE "USACA TOTAL"
5075 GOTO 100
9997 REM **MEMORY CHECK
9998 STOP
9999 PRINT AT 11,13;PEEK 16404+2
56*PEEK 16405-16384
```

*** KA2LHO HAM HELPER SERIES ***

BY

KRAIG D. PRITTS
KA2LHO

-14 USACA TOTALS (16K)

LOAD USACA TOTALS AND UPON A SUCCESSFUL LOAD A MENU WILL BE DISPLAYED. OPTIONS INCLUDE:

1) INITIAL INFORMATION-THIS CLEARS THE MEMORY AND ALLOWS A NEW DATABASE TO BE ENTERED.

2) CHECK INDIVIDUAL STATE-IS A SEARCH OPTION WHICH ALSO ALLOWS A CHANGE IN DATA.

3) PRINT ALL STATE TOTALS-PRINTOUT OF OPTION 2 BUT FOR ALL FIFTY STATES.

4) CHECK TOTAL OF ALL STATES-FIFTY STATE TOTALS OF ALL DATA.

5) EXIT PROGRAM-AND SAVE TO TAPE IF DESIRED.

DO NOT USE RUN. TO RESTART, USE GOTO 1. THIS, A SISTER PROGRAM TO THE USACA SERIES, SHOULD PROVE EVEN MORE USEFUL WHEN USED WITH THOSE PROGRAMS.

Editor's Note: Programs are either 'cut & pasted' and put with the heading where practical, or will appear at the nearest convenient insertion point.

USA-CA Totals Program

Kraig Pritts, KA2LHO

"USACA TOTALS" IS ONE OF A SERIES OF PROGRAMS MAKING UP THE KA2LHO HAM HELPER SERIES. THE PROGRAMS WERE DESIGNED TO PUT THE SINCLAIR FAMILY OF COMPUTERS TO WORK IN THE HAM SHACK. FOR MORE INFORMATION ON THE COMPLETE SERIES, SEE PAST ISSUES OF QZX OR SEND A BUSINESS SIZE S.A.S.E. TO THE ADDRESS LISTED LATER IN THIS ARTICLE.

"USACA TOTALS" IS A SISTER PROGRAM TO THE "USACA" SERIES DISCUSSED IN AN EARLIER ISSUE. THE FORMAT OF THE PROGRAMS IS SIMILAR BUT INSTEAD OF SEPARATE PROGRAMS FOR EACH STATE, THIS PROGRAM INCLUDES TOTAL COUNTIES WORKED, CONFIRMED, ETC. FOR ALL 50 OF THE UNITED STATES. MENU OPTIONS ARE DESCRIBED IN THE ACCOMPANYING INSTRUCTIONS WHICH ARE INCLUDED WITH ALL ORDERS FOR "USACA TOTALS". USE OF A PRINTER IS OPTIONAL, BUT MORE CONVENIENT. ALL INFORMATION THAT IS SENT TO A PRINTER IS ALSO AVAILABLE ON THE SCREEN.

THIS PROGRAM AS LISTED IS SET PRIMARILY FOR COUNTY HUNTING BUT IS ALSO USEFUL AS A WORKED ALL STATES PROGRAM OR WITH SOME SIMPLE MODIFICATIONS, A DXCC PROGRAM. THE POSSIBILITIES ARE LIMITED ONLY BY YOUR IMAGINATION (I THINK I HAVE HEARD THAT SOMEWHERE BEFORE---).

UPON TYPING IN THE PROGRAM ENTER "RUN" AND SELECT OPTION ONE FROM THE MENU. YOU MUST THEN ENTER ALL OF THE STATE INFO ALONG WITH YOUR LOG INFORMATION. THIS IS AN INITIAL DRAWBACK, BUT ONCE THE INFORMATION IS ENTERED THE PROGRAM IS VERY EASY TO USE. YOU SHOULD NEVER USE "RUN" WHEN THEN PROGRAM IS LOADED FROM TAPE OR YOU WILL LOSE ALL OF YOUR DATA. INSTEAD USE GOTO 1 OR GOTO 100 TO START THE PROGRAM IF A BREAK OCCURS.

FOR THOSE WHO PREFER A CASSETTE VERSION OF "USACA TOTALS" WITH ALL OF THE STATES ENTERED, I WOULD BE HAPPY TO PROVIDE THE PROGRAM ON TAPE WITH THE DATA ENTERED. THE PRICE IS $6.00, WHICH INCLUDES TWO VERIFIED COPIES OF THE PROGRAM ON A CASSETTE, INSTRUCTIONS, AND A LISTING OF THE PROGRAM.

ALL INQUIRIES, IMPROVEMENTS, AND ORDERS SHOULD BE SENT TO KRAIG D. PRITTS-KA2LHO, BOX 198, LEONARDSVILLE, NY 13364.

Bearcat 101 Scanner Program

Marty Irons, K2MI

Marty has had a lot of interest in his BC-101 program (see ad in previous QZX) and sent the program to QZX for publication. He says the Bearcat 101 is a more sensitive receiver than most, but is harder to use. It can be prorammed for an extremely wide range of frequencies, but won't work much outside the spec. frequencies without re-tuning.

```
PROGRAM  M 004   11/19/83

PURPOSE:         GENERATE BEARCAT 101 SCANNER SWITCH
                   SETTINGS FOR ANY FREQUENCY ON ANY BAND

VERSION:         8K ROM, 4K RAM, FAST MODE.

 10  REM  PROGRAM BC 101
 20  DIM O(15)                    WORK AREA
 30  PRINT AT 0,0;"BEARCAT 101 SWITCH SETTINGS"
 40  PRINT AT 8,0;"ENTER NEXT FREQUENCY  (0 = STOP)"
 50  INPUT Y
 60  CLS
 70  IF Y = 0 THEN GOTO 999
 80  LET O(14) = 14               PRESET FOR LOWEST BAND
 90  LET O(15) = 15               PRESET FOR LOWEST BAND
100  LET N = 20480                N = SWITCH 1 VALUE
110  LET M = 1000                 M = MULTIPLIER
120  IF Y >= 10.745 AND Y <= 51.7
          THEN GOTO 300                    VHF LOW BAND
130  IF Y >= 143.745 AND Y <= 184.7
          THEN GOTO 400                    VHF HIGH BAND
140  IF Y >= 409.6625 AND Y<= 512.05
          THEN GOTO 500                    UHF BAND

200  REM  OUT OF BAND
220  PRINT AT 4,0;Y; " MHZ IS OUT OF BAND"
240  GOTO 30

300  REM  VHF LOW BAND                (14 AND 15 UP)
310  LET U = 51700                    UPPER LIMIT IN KHZ
320  GOTO 600

400  REM  VHF HIGH BAND               (14 DOWN, 15 UP)
410  LET O(14) = 0                    SWITCH 14 OFF
420  LET U = 184700                   UPPER LIMIT IN KHZ
430  GOTO 600

500  REM  UHF BAND                    (14 UP, 15 DOWN)
510  LET O(15) = 0                    SWITCH 15 OFF
520  LET N = 512000                   SWITCH 1 VALUE
530  LET U = 5120500                  UPPER LIMIT KHZ * 10
540  LET M = 10000                    MULTIPLIER
600  COMMON ROUTINES
610  LET Y = Y * M
620  FOR I = 1 TO 13                  CREATE TABLE OF
630  LET O(I) = N                       KHZ VALUES FOR
640  LET N = INT (N / 2)                EACH SWITCH
650  NEXT I                             FROM 1 TO 13
660  LET Z = U - Y

700  REM PRINT SWITCH SETTINGS
720  PRINT AT 2,0;"SWITCHES UP FOR ";Y/M;" MHZ:",,,  NOTE COMMAS
740  FOR I = 1 TO 13
750  IF Z < O(I) THEN GOTO 780
760  LET Z = Z - O(I)
770  PRINT I;"  ";                   NOTE SEMI-COLON
775  IF I < 10 THEN PRINT " ";       ADJUST FOR SHORT LENGTH
780  NEXT I
790  IF O(14) <> 0 THEN PRINT "14  ";     NOTE SEMI-COLON
800  IF O(15) <> 0 THEN PRINT "15  "
810  PRINT AT 16,0;"YOU MAY HAVE TO RETUNE IN ORDER
                    TO RECEIVE FREQUENCIES OUTSIDE
                    THE RANGES IN THE BEARCAT MANUAL"
820  GOTO 30
999  STOP
```

TO TEST THIS PROGRAM:

(1) ENTER THE LOWEST FREQUENCY IN EACH BAND. (SEE LINES 120 TO 140 FOR BAND LIMITS). SWITCHES 1 - 13 SHOULD BE UP, AND THE CORRECT BAND SWITCHES (14 AND 15) SHOULD BE UP.

(2) ENTER THE HIGHEST FREQUENCY IN EACH BAND. (SEE LINES 120 TO 140 FOR BAND LIMITS). SWITCHES 1 - 13 SHOULD BE DOWN, AND THE CORRECT BAND SWITCHES (14 AND 15) SHOULD BE UP.

(3) ENTER ONE OR MORE FREQUENCIES IN THE BEARCAT 101 MANUAL, AND CHECK TO SEE THAT THE CORRECT SWITCHES ARE UP.

30	MHZ	1	6	7	8	9	11	14	15
50	MHZ	5	7	9	11	14	15		
146	MHZ	1	2	3	4	8	9	10	11	15
174	MHZ	2	7	9	10	11	15			
416	MHZ	1	2	3	4	11	14			
509.5875	MHZ	6	7	11	13	14				

MARTY IRONS, K2MI, 46 MAGIC CIRCLE, GOSHEN, NY 10924

QSL-III Program

Kraig Pritts, KA2LHO

"QSL III" IS ONE OF A SERIES OF PROGRAMS MAKING UP THE KA2LHO HAM HELPER SERIES. THE PROGRAMS WERE DESIGNED TO PUT THE SINCLAIR FAMILY OF COMPUTERS TO WORK IN THE HAM SHACK. FOR MORE INFORMATION ON THE COMPLETE SERIES, SEE PAST ISSUES OF QZX OR SEND A BUSINESS SIZE S.A.S.E. TO THE ADDRESS LISTED LATER IN THIS ARTICLE.

"QSL III" IS A QSL PRINTING PROGRAM THAT HAS BEEN SQUEEZED INTO JUST 1K OF MEMORY SPACE. WITH THIS LIMITATION OF MEMORY, BELLS AND WHISTLES ARE NOT A POSSIBILITY BUT ALL BASIC QSO INFORMATION IS PRESENT ALONG WITH YOUR CALLSIGN IN LARGE LETTERS. THE LARGE CALLSIGN IS BUILT THROUGHT THE USE OF THE VARIOUS GRAPHIC SYMBOLS ON THE COMPUTER. THE CALL IS BUILT IN LINE 16 OF THE PROGRAM.

DUE TO THE LIMITED MEMORY, IT IS ADVISABLE TO ENTER LINE 16 AND CHECK IT ON THE SCREEN BEFORE ENTERING THE REST OF THE LISTING. ONCE THE ENTIRE LIST IS TYPED IN THERE IS NOT ENOUGH MEMORY SPACE TO ALLOW EDITING OF LINE 16. YOU SHOULD ALSO ENTER ALL LINES WHICH USE NUMBERS FIRST, THEN ENTER THOSE WHICH DO NOT. THIS IS ALSO BECAUSE OF THE SMALL MEMORY WHICH HAS MORE DIFFICULTY WITH MEMORY HUNGRY NUMERICS. AS YOU ENTER THE PROGRAM, THE LINES WILL BEGIN TO "JUMP AROUND" THE SCREEN. THIS IS NORMAL BECAUSE OF THE LIMITED MEMORY---TRUST ME, THE PROGRAM DOES FIT AND RUN IN ONLY 1K, AS IT IS PRINTED HERE. I USE IT ALL THE TIME.

BECAUSE OF THE CARE WITH WHICH "QSL III" MUST BE TYPED INTO THE COMPUTER, I AM WILLING TO PROVIDE THE PROGRAM ON TAPE WITH YOUR CALLSIGN AND QTH INFO ALREADY ENTERED. THE PRICE IS $5.00 WHICH INCLUDES TWO COPIES OF THE PROGRAM ON A CASSETTE, INSTRUCTIONS, AND A LISTING OF THE PROGRAM.

ALL INQUIRIES, IMPROVEMENTS, OR ORDERS SHOULD BE SENT TO KRAIG D. PRITTS-KA2LHO, BOX 198, LEONARDSVILLE, NY 13364.

```
  1 REM "QSL III"
  2 LET B=1
  3 LET D=B+B
  4 LET C=B-B
  5 LET A=D+B
  6 LET E=D*D*D
  7 GOTO E+E+A
  8 INPUT A$
  9 LPRINT A$
 10 CLS
 12 RETURN
 16 PRINT AT B,A;"
                 ";AT D,A;"
                 ";AT A,A;"
                 ";AT A+B,A;"
                 ";AT A+D,A;"
                 "
 17 CLEAR
 18 RETURN
 20 LPRINT AT E,E;"TO RADIO-";
 21 PRINT AT E,E;"TO RADIO-"
 25 GOSUB E
 30 LPRINT
 35 LPRINT "DATE-";
 37 PRINT "DATE-"
 40 GOSUB E
 45 LPRINT ,"TIME-";
 47 PRINT "TIME-"
 50 GOSUB E
 55 LPRINT "BAND-";
 57 PRINT "BAND-"
 60 GOSUB E
 65 LPRINT ,"RS(T)-";
 67 PRINT "RS(T)-"
 80 GOSUB E
100 LPRINT
105 GOSUB E+D
107 PRINT
110 PRINT "     KRAIG D. PRITTS-
KA2LHO","     BOX 198"
120 PRINT "     LEONARDSVILLE, N
Y 13364"
125 COPY
```

```
        TO RADIO-KA2K

DATE-06/06/83
                    TIME-2306
BAND-20 METERS
                    RS(T)-59

        KA2LHO

    KRAIG D. PRITTS-KA2LHO
    BOX 198
    LEONARDSVILLE, NY 13364
```

10-10 Sort Program

Cecil Johnson, W5SRQ

Here's a nice program for use with the 10-10 numbers. Cecil says hello to KA1BPE, KE5CY, & WD5FMM who he copied on 12/3/83, but he was unable to be heard! For you newcomers, the 10-X (10-10) International Net, Inc. is a network of radio amateurs who work to promote activity and good operating practice on the ten meter amateur band. The members receive awards by submitting a list of 10-X numbers in numerical order. There are over 37,000 members.

Program notes: The ZX/TS will sort numbers as line numbers but only up to 9999. This program will count and sort 10-X numbers and provide a double spaced output suitable for award submission. After inputing 8 inputs, you must use "CONT" to continue. The computer requires about 13 minutes in SLOW mode to sort 100 numbers. This program may have other applications, depending on your ingenuity.

```
  1 REM 10-X SORT
        CECIL K. JOHNSON  W5SRQ
  2 REM 1009 CREST PARK DR.
        GARLAND,TX   75042
  3 REM PROGRAM REVISED
        11-16-83 AND 12-17-83
 10 PRINT "THIS PROGRAM WILL CO
UNT AND SORT10-X NUMBERS, WITH A
 DOUBLE"
 15 PRINT "SPACE BETWEEN NUMBER
S."
 20 PRINT
 25 PRINT "USE ""CONT"" TO CONT
INUE PROGRAM  OR LISTING."
 30 PRINT
 35 PRINT "ENTER ""499"" TO INI
TIATE SORT."
 40 PRINT
 45 PRINT "WHILE THE COMPUTER I
S SORTING,  THE APPEARANCE OF A
DOT SHOWS   THAT ANOTHER NUMBER
HAS BEEN    PLACED IN ORDER."
 50 PRINT
 80 DIM Q(150)
 90 LET Z=0
100 LET Y=10
110 PRINT "ENTER NUMBER ";Z+1;"
";
120 INPUT Q(Y)
130 IF Q(Y)=499 THEN GOTO 180
140 LET Z=Z+1
150 PRINT Q(Y)
160 LET Y=Y+1
170 GOTO 105
180 CLS
190 FOR X=10 TO Z+9
200 PRINT "■";
210 FOR N=X+1 TO Z+9
220 IF Q(X)<Q(N) THEN GOTO 260
230 LET E=Q(X)
240 LET Q(X)=Q(N)
250 LET Q(N)=E
260 NEXT N
270 NEXT X
280 FOR N=1 TO Z
290 PRINT
300 PRINT N;TAB 4;Q(N+9)
310 NEXT N
320 STOP
```

```
400 REM SUGGEST USE THIS
        PROGRAM FIRST TO COUNT
401 REM AND SORT 100 10-X
        NUMBERS.  PRINT THE
402 REM OUTPUT ON YOUR PRINTER.

403 REM THEN RUN THE OTHER INFO
        AS PRINT STATEMENTS TO
404 REM BE ALIGNED WITH AND
        PASTED TO THE 10-X
405 REM NUMBERS.

406 REM USE LINE NUMBERS 1 TO
        100 FOR THE PRINT
407 REM STATEMENTS TO AID IN
        ALIGNMENT.
408 REM
        EXAMPLES OF PRINT
409 REM STATEMENTS FOLLOW USING
        LINE NUMBERS + 500.
410 REM
        TYPE IN "RUN 500" TO
411 REM VIEW THE PRINT.  USE
        THE "COPY" KEY TO
412 REM COPY THE CONTENTS OF
        THE SCREEN ON PAPER.
413 REM
        EQUIPMENT USED
414 REM IN THIS PROGRAM.
          TIMEX 1000 COMPUTER
415 REM    TIMEX 1016 16K MEMORY
          TIMEX 2040 PRINTER
416 REM
501 PRINT "W5SRQ  CECIL   GARLA
ND        TX "
502 PRINT "W9AUO  BEN     BLOOM
INGTON    IL "
503 PRINT "W4BOI  TOM     WINST
ON SALEM  NC "
504 PRINT "K7OMK  GLEN    GARDE
N CITY    SD "
```

Editor's Doings

Bo Barry, W4GHV

While getting on RTTY remains on 'the front burner', I have been fiddling a bit with a few machine language programs. I had a lot of fun with the Scientific Software's Disassembler reviewed in the last issue, it came in pretty handy making back-up copies of all my 'protected' tapes. Next, I became intrigued with a game, Highway Robbery, that was in Jan/Feb Sync Magazine. It had the hex codes, a hex loader, and a bunch of other programs with it. The extra programs were to be used if you had trouble punching in all the hex codes perfectly. It looked like a bunch of work, so I took the even harder way out. The source code was also given, so I decided to enter it using Scientific Software's Assembler/Debugger, described in July QZX. It was not as easy as it sounds, but has been challenging and educational. I will have a 'tutorial' article on it

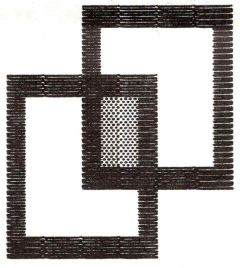
shortly, assuming I have no problems finishing it up.

One important lesson I have found with my TS1500 is that I can only have ONE of the recorder cables connected at a time! It took a long time for me to pin this problem down. I get a loud 'squeal' instead of the 5 second quiet time while recording with both cables connected to my CTR-80A recorder.

Other than tinkering with HOT Z-II which I described briefly in this issue, I don't have much to report. As you flood us with your renewals, please send some feedback as to your background or as to what type of articles you want in QZX.

Products in Review

Sent to us from 2-Bit Software, P.O. Box 2036, Del Mar, Calif., 92014 was their Turning the Truth Tables software. It consists of four (2K) programs having an unusual entertaining & educational nature. Union Station is a game used to help you learn the logical meanings of 'AND' and 'OR'. Various sketches are drawn and a neat graphiral choo-choo (train) crawls across the screeen when you guess the correct answer. (See below).



Treasure Hunt teaches you the differences between >, <, and >=. You move around on a X-Y graph trying to find an invisible pirate (who moves around a bit). Rational Runners checks out your ability to distinguish whether a statement is TRUE or FALSE (ie. is 5<=4 ?). Two neat little runners chase around a race track as you and your partner guess the correct answers. And Truth or Consequences allows you to learn about IF THEN ELSE statements taking you thru a maze if you do OK. I'll let you decide what audience these were designed for, and will readily admit that I enjoyed going thru them. It looks like a nice way to get someone 'going' on a computer and the programs are simple enough to be analyzed for programming techniques. The software comes in an attractive box, done professionally (and with a sense of humor- The warranty is no good if your dog chews the tape). 2-Bit Software has at least 6 other nice game packages and promises many more things for the ZX/TS gang. I am looking forward to seeing some of their new products.

Next, we have a few details on the ZX Spectrum Microdrive. Bob Howard, WA6DLI sent us a few pages from the Oct/Nov 83 issue of ZX Computing magazine. I'm assuming its a British publication, since all the prices have the funny looking ell (how do you spell L?) I bet their issues are as late getting to you here in the US as QZX is! They have an excuse though. I wish I had time to read some of the non-US ZX/TS pubs, and we would appreciate tidbits, reviews, news, etc from them, for publication in QZX.

The Spectrum Microdrive with the interface sells for 80 pounds in England, includes an RS-232 interface along with networking capability. It is not a floppy disk drive, but is similar to the Stringy Floppy that has been around a while. By the way, the Stringy Floppy is no longer available for the Timex here. The storage wafers hold about 80K and are rather unique looking. It 'plays' the entire endless loop of tape in about 10 seconds. You can have up to 8 drives and can tie together 64 Spectrums. I won't go into details, the article is several pages long. I have no idea if this will work with the TS-2068 or will be available here. Bob also sent a copy of an ad for a ZX Slowloader that loads ZX81 tapes into the Spectrum. Again I don't know if it will work with the 2068.

Just received for review is Sinware's HOT Z-II (See the unclassified ad in this issue). This is a spectacular piece of software and it will take me a while to do it justice. The orginal version was reviewed in Jan 83 QZX by Josh, W4MHQ. HOT Z-II combines a line-by line assembler, a LABELLING disassembler, a single-stepper and a simple editor. It can also be used for tape duplication of protected tapes. It has a built-in NAME file for labels that can be added to. It is really convenient to have the referenced addresses labelled. HOT Z-II is a must for the experienced assembly language programmer and would be a wonderful 'starter' for the beginner if a series of tutorial articles on its use could be written. The user's guide is a bit complicated, but thorough. Hopefully by the next issue I will have had time to use it more, and I may try to come up with something for beginners.

THE ORGANIZER IS ONE OF THE MORE USEFUL PROGRAMS FROM TIMEX. I HAVE BEEN USING IT FOR SEVERAL HAM USES. THE MACHINE CODING PERMITS RAPID ACCESS OF RECORDS, AND THE SORTING ROUTINES ARE INSTANTANEOUS. THESE ARE NEEDED FEATURES FOR ANY LOG DUPING OR CONTEST LOGGING USES.

THE PROGRAM PRESENTS YOU WITH A BLANK RECORD THAT YOU CAN SPECIFY FIXED RECURRING FIELDS AND VARIABLE FIELDS FOR. THE FIXED FIELDS ARE COMMON TO ALL RECORDS. THE VARIABLE FIELDS ARE FILLED IN AS DESIRED FOR EACH RECORD.

THE SIMPLICITY OF OPERATION IS HEIGHTENED BY THE USE OF A MENU TO SELECT VARIOUS PROGRAM OPTIONS.

THE PROGRAM CAN EVEN BE USED AS A WORD PROCESSOR. THIS IS DONE BY SPECIFYING A VARIABLE FIELD AT THE FIRST OF EACH LINE.

THIS LETTER WAS PREPARED BY THIS METHOD.

THE INSTRUCTION SHEET IS SPARSE BUT THE SUPPLIED EXAMPLE PROGRAM FILE OF COUNTRIES AND CAPITALS IS USEFUL FOR TRYING OUT THE VARIOUS COMMANDS.

THIS PROGRAM IS THE FIRST TIMEX PROGRAM THAT I HAVE SEEN MAKE GOOD USE OF THE PRINTER.

UNDER A TYPICAL CONTEST LOG FORMAT, YOU CAN EXPECT ROOM FOR OVER 200 QSO S. CONFIGURED AS A WORD TYPING PROGRAM, TEXT ABOUT 5 TIMES THIS LONG CAN BE HANDLED WITH 16K RAM.

OVERALL, THE PROGRAM LOOKS TO BE A GOOD VALUE.

SINCERELY YOURS,

Rolla R Wade

ROLLA R. WADE KF4TF

QZX NET INFO

FREQ	TIME	DAY	SOURCE	LOCATION
3.600	1930	WED	G4INP	EUROPE
3.980	0100	SAT	N3CJP	EAST COAST
4.020	0000	WED	WB5HVS	LA (MARS)
7.228	1900	SAT	K4KEP	EAST COAST
7.228	1900	SUN	K4KEP	EAST COAST
7.235	1700	SAT	W6AMW	WEST COAST
7.240	1600	SUN	K02F	EAST COAST
7.245	0001	WED	W9CQD	USA
14.150	1900	THU	G4INP	EUROPE
14.200	1000	SAT	G4INP	EUROPE
14.200	1400	SAT	G4INP	EUROPE
14.200	1000	SUN	G4INP	EUROPE
14.329	2000	SUN	W9CQD	USA
14.345	0100	THU	NU4V	USA
146.04	0100	THU	KB3YT	PITTSBURGH
146.16	0000	THU	N1CB	VERMONT/NH
146.67	0230	TUE	K5XY	MANHATTEN,NY
147.84	0000	WED	WB5HVS	NEW ORLEANS

UNCLASSIFIED ADS

WANTED: UNCLASSIFIED ADS for publication in QZX. Cost is 1 cent for each keystroke (characters, blanks, etc.). Payment must be included with order. This is an excellent way to sell your program or unwanted equipment, ask for help, or find a specific program. Send your ad with payment to QZX, 2025 O'Donnell, Las Cruces, NM 88001.

FOR SALE: TS1000 HAM HELPER PROGRAMS - Some written for county hunting and all are in BASIC for easy mods to suit individual taste. Write for details (SASE appreciated) to KA2LHO, Kraig D. Pritts, Box 198, Leonardsville, NY 13364 (see QZX for sample).

FOR SALE: ZX81/TS1000 edgeboard wire-wrap connectors; keyed; bifurcated contacts; manufactured by TI; $5.00 each. Pc piggy-back extender boards; $1.50 each. Economical experimenting with Radio-Shack's 276-158 and 161 project boards and these connectors. Add $0.75 shipping per order. Paul Hunter, 1630 Forest Hills Drive, Okemos, MI 48864.

FOR SALE: HOT Z-II. Assembler, disassembler, single stepping multi-purpose utility program. 16K (minimum) versions for the T/S 1000 and 1500. $24.95 + $2.00 postage. SINWARE, BOX 8032, Sante Fe, NM 87504.

QZX FRIENDS

N9AYP -- Lou writes that his T/S 1000 and ZX80 have been joined by a T/S 2068. He is looking for programs for his new computer and is collecting information on packet radio.

WA2LZZ -- Tim is recently back from England and is looking for programs for the T/S 2068, which he has coming.

N1AXQ -- Ben built a ZX81 and added a keyboard. He runs NU4V's cw program.

W1EFK -- Roy says that he has not been able to get his Z Dubber to work with his new T/S 1500.

NEW!

ROMPAK PLUG IN

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TS/1500

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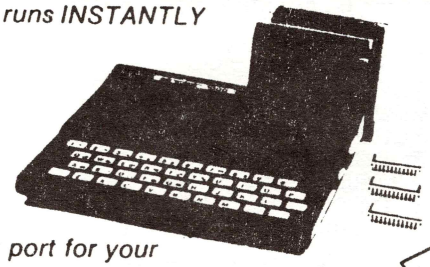

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16K required

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- *WATCH FOR - TOOL PAK and GRAPHIC PAK coming soon.*

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Cal. res. add 6½% Total .....

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Rompak, Inc. Suite 100
8206 Blackburn Avenue
Los Angeles California 90048

34. WB3JDP made a loading meter by putting a sensitive dc meter across the ear jack and adjusting a series resistor until 5v p-p read 3/4 scale and then enclosed the whole thing in a small metal box with jacks to take wires to the computer and the tape recorder.

35. IW2BZT says that he saved all his loading problems by using a G.E. computer tape recorder and radio shack 10 minute cassettes.

"CONTEST LOG" IS ONE OF A SERIES OF PROGRAMS MAKING UP THE KA2LHO HAM HELPER SERIES. THE PROGRAMS WERE DESIGNED TO PUT THE SINCLAIR FAMILY OF COMPUTERS TO WORK IN THE HAM SHACK. FOR MORE INFORMATION ON THE COMPLETE SERIES, SEE PAST ISSUES OF QZX OR SEND A BUSINESS SIZE S.A.S.E. TO THE ADDRESS LISTED LATER IN THIS ARTICLE.

"CONTEST LOG" IS DIFFERENT FROM SO MANY OTHER CONTEST LOGS IN THAT THE ACTUAL PRINTOUT IS SUITABLE FOR TURNING IN AS YOUR LOGBOOK FOR A PARTICULAR CONTEST COMPLETE WITH DECLARATION. ALSO INCLUDED IS A HEADING (DESCRIBED LATER) AND AREAS FOR SIGNATURE AND VALIDATION.

ALL MENU OPTIONS AND POSSIBLE MODIFICATIONS ARE DESCRIBED IN THE INSTRUCTIONS WHICH FOLLOW. THESE ARE THE SAME INSTRUCTIONS INCLUDED WITH EACH CASSETTE COPY OF "CONTEST LOG" FOR WHICH I RECEIVE AN ORDER. IF YOU DO NOT HAVE THE TIME TO TYPE IN THE LISTING IT CAN BE PROVIDED ON CASSETTE FOR $6.00. THIS INCLUDES INSTRUCTIONS, A LISTING, AND TWO VERIFIED COPIES OF THE PROGRAM ON CASSETTE.

ALL INQUIRIES, IMPROVEMENTS, OR ORDERS FOR "CONTEST LOG" SHOULD BE SENT TO:

KRAIG D. PRITTS
BOX 198
LEONARDSVILLE, NY
13364

I HOPE YOU EXPERIMENT AND IMPROVE UPON THIS PROGRAM AND ARE ABLE TO PUT IT TO USE IN YOUR SHACK.

P.S.

DOES ANYONE HAVE A COPY OF TIMEX SINCLAIR USER MAG VOL. #1, #5? NO ONE LOCALLY GOT THEIRS, AND THE PUB DOESN'T HAVE A SINGLE ISSUE LEFT! I NEED A COPY OF THE COLOR BOARD ARTICLE, AND WILL GLADLY REIMBURSE! W4GHV 8

LISTING FOR "CONTEST LOG"

```
  2 REM **IF YOU BREAK THIS PRO
GRAM, DO NOT USE RUN.  INSTEAD,
USE GOTO 100.
  5 GOTO 100
 10 DIM Z$(500,8)
 11 LET I$="                "
 15 GOTO 200
 20 IF LEN B$=1 THEN LET B$=B$+
" "
 21 IF LEN B$=2 THEN LET B$=B$+
" "
 22 IF LEN B$=3 THEN LET B$=B$+
" "
 23 IF LEN B$=4 THEN LET B$=B$+
" "
 24 IF LEN B$=5 THEN LET B$=B$+
" "
 25 IF LEN B$=6 THEN LET B$=B$+
" "
 26 IF LEN B$=7 THEN LET B$=B$+
" "
 27 RETURN
 40 PRINT "** INDICATE [illegible]ENT OR
[illegible]ECEIVED **"
 42 RETURN
 50 CLS
 52 PRINT AT 10,8;"ARE YOU SURE
?"
 54 LET X$=INKEY$
 56 IF X$="Y" THEN GOTO 10
 58 IF X$="N" THEN GOTO 100
 60 IF X$="" THEN GOTO 54
 62 GOTO 54
 100 CLS
 105 PRINT "**********************
**********"
 110 PRINT "*      ZX/TS  CONTES
T LOG     *"
 115 PRINT "**********************
**********"
 120 PRINT
 122 PRINT
 125 PRINT TAB 5;"-CHOICE OF OPT
IONS-"
 130 PRINT
 131 PRINT "A.  ENTER INITIAL IN
FORMATION"
 135 PRINT "B.  ENTER PRESENT LO
G"
 140 PRINT "C.  BEGIN A NEW LOG"
 145 PRINT "D.  PRINT DECLARATIO
N"
 150 PRINT "E.  EXIT PROGRAM"
 155 LET H$=INKEY$
 160 IF H$="" THEN GOTO 155
 165 IF H$="A" THEN GOTO 200
 170 IF H$="B" THEN GOTO 300
 175 IF H$="C" THEN GOTO 50
 180 IF H$="D" THEN GOTO 400
 185 IF H$="E" THEN GOTO 500
 190 GOTO 155
 200 CLS
 202 PRINT "DATE OF LOG?"
 204 INPUT T$
 206 PRINT T$
 208 PRINT
 210 PRINT "NAME OF CONTEST?"
 212 INPUT C$
 214 PRINT C$
 216 PRINT
 218 PRINT "YOUR NAME - CALL?"
 220 INPUT N$
 222 PRINT N$
 224 PRINT
 226 PRINT "STREET ADDRESS?"
 228 INPUT A$
 230 PRINT A$
 232 PRINT
 234 PRINT "CITY, STATE, AND ZIP
```

```
 236 INPUT S$
 238 PRINT S$
 240 PRINT
 242 PRINT "COUNTY?"
 244 INPUT O$
 246 PRINT O$
 248 PRINT
 250 PRINT "ARRL SECTION?"
 252 INPUT R$
 254 PRINT R$
 256 PRINT AT 21,0;"""P"" TO PRI
NT---""R"" TO REDO"
 258 LET X$=INKEY$
 260 IF X$="P" THEN GOTO 270
 262 IF X$="R" THEN GOTO 200
 264 IF X$="" THEN GOTO 258
 266 GOTO 260
 270 LPRINT C$
 272 LPRINT
 274 LPRINT T$
 276 LPRINT
 278 LPRINT N$
 280 LPRINT A$
 282 LPRINT S$
 284 LPRINT
 286 LPRINT O$;" COUNTY"
 288 LPRINT
 290 LPRINT R$;" SECTION (ARRL)"
 295 GOTO 300
 300 CLS
 302 PRINT "ENTER CALL"
 304 INPUT B$
 305 IF B$="QUIT" OR B$="STOP" T
HEN GOTO 100
 306 GOSUB 20
 307 FAST
 308 FOR X=1 TO 500
 310 IF B$=Z$(X) THEN GOTO 330
 312 NEXT X
 314 SLOW
 316 PRINT "[illegible] A DUPE"
 318 PRINT "WORKED? (Y/N)"
 320 LET X$=INKEY$
 322 IF X$="Y" THEN GOTO 350
 324 IF X$="N" THEN GOTO 300
 326 IF X$="" THEN GOTO 320
 328 GOTO 320
 330 SLOW
 332 LET X=0
 334 PRINT AT 3,0;"**[illegible]**"
 336 IF X=3 THEN GOTO 343
 338 PRINT AT 3,0;"**DUPE**"
 340 LET X=X+1
 342 GOTO 334
 343 LPRINT "=================
=============="
 344 LPRINT B$;" *DUPE*";TAB 30;
"#"
 346 GOTO 300
 350 CLS
 351 FOR X=1 TO 500
 352 IF Z$(X)=I$ THEN GOTO 357
 353 NEXT X
 354 PRINT "SORRY, LOG IS FULL."
 355 PAUSE 50
 356 GOTO 100
 357 LET Z$(X)=B$
 358 LPRINT "=================
=============="
 359 LPRINT B$;
 360 PRINT "TIME (UTC)?"
 361 INPUT E$
 362 LPRINT E$;" UTC";TAB 27;X
 363 PRINT "REPORT?"
 364 GOSUB 40
 365 INPUT F$
 366 LPRINT F$;
 368 PRINT "REPORT?"
 370 GOSUB 40
 372 INPUT F$
 374 LPRINT F$
```

```
 376 PRINT "QTH (SECTION, COUNTY
, ETC.)?"
 378 INPUT G$
 380 LPRINT G$
 382 GOTO 300
 400 CLS
 410 LPRINT "=================
=============="
 415 LPRINT
 420 LPRINT "  ""I HEREBY CERTIF
Y THAT, TO THEBEST OF MY KNOWLED
GE, ALL","INFORMATION CONTRINED
IN THIS","LOG IS TRUE AND CORREC
T AND THATI HAVE CONDUCTED MYSEL
F THROUGH-OUT THIS CONTEST IN AC
CORDANCE","WITH ALL NATIONAL AND
 INTER-","NATIONAL AMATEUR RADIO
 REGULA-","TIONS."""
 425 LPRINT
 430 LPRINT "SIGNED:"
 435 LPRINT "          ----------
----------"
 440 LPRINT
 445 LPRINT "DATE:"
 450 LPRINT "          ----------
----------"
 455 GOTO 100
 500 CLS
 502 PRINT AT 3,0;"IF YOU HAVE E
NTERED NEW DATA OR","CHANGED ANY
 DATA, THIS PROGRAM","MUST BE SA
VED TO TAPE."
 504 PRINT AT 7,0;"IF YOU WISH T
O SAVE THE PROGRAM","AND DATA TH
EN PRESS ""S"" ."
 506 PRINT AT 10,0;"IF YOU WISH
TO RETURN TO THE","MENU WITHOUT
ANY DATA LOSS","PRESS ""R"" ."
 508 PRINT AT 14,0;"IF YOU WISH
SIMPLY TO EXIT THE","PROGRAM, PR
ESS ""Q"" ."
 510 PRINT AT 18,0;"ENTER YOUR C
OMMAND."
 512 LET X$=INKEY$
 514 IF X$="" THEN GOTO 512
 516 IF X$="S" THEN GOTO 550
 518 IF X$="R" THEN GOTO 100
 520 IF X$="Q" THEN STOP
 522 GOTO 512
 550 CLS
 552 PRINT AT 10,10;"START TAPE"
;AT 12,10;"PRESS [illegible]"
 554 INPUT X$
 556 CLS
 558 SAVE "CONTEST LO[illegible]"
 560 GOTO 500
 600 CLS
 602 PRINT AT 2,0;"**************
********************"
 605 PRINT AT 3,0;"*       ZX/TS
 CONTEST  LOG      *"
 607 PRINT AT 4,0;"**************
********************"
 610 PRINT AT 6,14;"BY"
 615 PRINT AT 8,8;"KRAIG D. PRIT
TS"
 620 PRINT AT 9,12;"KA2LHO"
 625 FOR X=1 TO 75
 630 NEXT X
 635 GOTO 100
```

INSTRUCTIONS FOR "CONTEST LOG"

*** KA2LHO HAM HELPER SERIES **!

BY

KRAIG D. PRITTS
KA2LHO

-13 CONTEST LOG (16K)

LOAD CONTEST LOG. WHEN LOADED THIS PROGRAM WILL START AUTOMATICALLY AND THE MENU WILL APPEAR ON THE SCREEN.

A. ENTER INITIAL INFORMATION-ASKS FOR INFORMATION WHICH WILL BE USED TO PRINT OUT THE HEADING OF THE CONTEST LOG. INFORMATION INCLUDES DATE, NAME OF CONTEST, YOUR NAME, CALL, ADDRESS, COUNTY, AND ARRL SECTION. THIS IS, FOR THE MOST PART, THE STANDARD HEADING INFORMATION FOR CONTESTS. THIS SECTION IS ALSO USED WITH OPTION C.

B. ENTER PRESENT LOG-ALLOWS THE OPERATOR TO CONTINUE WITH A LOG THAT WAS STORED ON TAPE FROM AN EARLIER SESSION. NO STORED CALLS WILL BE LOST WITH THIS CHOICE.

C. BEGIN A NEW LOG-WILL CLEAR THE MEMORY AND START A COMPLETELY NEW LOG (INCLUDING INITIAL INFORMATION).

D. PRINT DECLARATION-PRINTS THE USUAL REQUIRED DECLARATION REQUIRED BY MOST CONTESTS AT THE END OF YOUR LOG.

E. EXIT PROGRAM-ALLOWS THE OPERATOR TO SAVE THE CALLS ON TAPE IF DESIRED FOR USE AT A LATER TIME.

A PRINTED LOG OF EACH CONTACT IS PROVIDED IF A PRINTER IS ATTACHED TO THE COMPUTER. INFORMATION IN THE LOG IS CALL, TIME, REPORTS, AND QTH. OTHER ITEMS MAY BE ADDED BY ALTERING THE ROUTINE IN LINES 360-382.

AT PRESENT THE PROGRAM IS SET UP TO HANDLE 500 CALLS OF EIGHT CHARACTERS EACH. TO ALTER THESE FIGURES, MAKE THE APPROPRIATE CHANGES IN LINES 10 AND 300. WITH 16K OF RAM UP TO 1200 CALLS SHOULD FIT.

CONTEST LOG IS VERY USEFUL IF YOU HAVE A PRINTER---IT ALMOST ELIMINATES THE NEED FOR ANY WRITING. IT ALSO ASSISTS IN SCORING BY CLEARLY INDICATING DUPES AND NUMBERING NON-DUPLICATE CONTACTS.

EVEN IF YOU DO NOT HAVE A PRINTER, HOWEVER, THE PROGRAM IS A VERY EFFICIENT DUPING PROGRAM. DUPLICATES ARE VERY CLEARLY INDICATED SO YOU WILL NOT LOG THEM BY ACCIDENT.

I HOPE THAT YOU FIND THIS PROGRAM USEFUL IN YOUR HAM SHACK AND HELPFUL DURING YOUR CONTESTING.

73,

Kraig D. Pritts

KRAIG D. PRITTS

"CONTACT LIST" IS ONE OF A SERIES OF PROGRAMS MAKING UP THE KA2LHO HAM HELPER SERIES. THE PROGRAMS WERE DESIGNED TO PUT THE SINCLAIR FAMILY OF COMPUTERS TO WORK IN THE HAM SHACK. FOR MORE INFORMATION ON THE COMPLETE SERIES, SEE PAST ISSUES OF QZX OR SEND A BUSINESS SIZE S.A.S.E. TO KRAIG D. PRITTS-KA2LHO, BOX 198, LEONARDSVILLE, NY 13364.

"CONTACT LIST" IS A SIMPLE 1K ROUTINE WHICH CAN BE USED EITHER ALONE OR AS A SUBROUTINE IN A LARGER PROGRAM. I HAVE USED IT BOTH WAYS IN MY OWN HAM OPERATING. IT WAS PRIMARILY DESIGNED AS A SHORT PROGRAM TO HELP IN THE REDUCTION OF EXTRA PAPER SCATTERED ON THE OPERATING TABLE AROUND THE RADIO. ALL PERTINENT LOG INFORMATION FOR EACH CONTACT IS AVAILABLE ON THE PRINTOUT. POSSIBILITIES FOR ADAPTATIONS ARE ENDLESS AND INCLUDE COUNTY HUNTING (AS IN ITS PRESENT FORMAT), CONTEST LOGGING, AND ANY FORM OF NET OPERATION.

I HOPE THAT YOU WILL FIND THE ROUTINE USEFUL AND HELPFUL IN YOUR HAM SHACK.

```
  1 REM "CONTACT LIST""
 50 LET Z$="*INDICATE ■ENT OR ■
ECEIVED*"
 75 CLS
100 PRINT "CALL-";
105 INPUT A$
110 PRINT A$
115 PRINT "COUNTY,STATE-";
120 INPUT B$
125 PRINT B$
130 PRINT "REPORT-",,Z$,
135 INPUT C$
140 PRINT C$
145 PRINT "REPORT-",,Z$,
150 INPUT D$
155 PRINT D$
160 PRINT "TIME (UTC)-";
165 INPUT E$
170 PRINT E$
175 PRINT AT 20,0;"IF ALL IS OK
AY PRESS ■■, IF NOTPRESS ■■■."
180 LET F$=INKEY$
185 IF F$="" THEN GOTO 180
190 IF F$="P" THEN GOTO 200
195 IF F$="N" THEN RUN
196 GOTO 180
200 LPRINT A$,E$;" UTC",B$
205 LPRINT C$,D$
210 LPRINT "********************
**********"
215 RUN
```

SAMPLE PRINTOUT

```
                  0019 UTC
KA2LHO
MADISON,NY        59R
595
**************************************
```

"UTC" IS ONE OF A SERIES OF PROGRAMS MAKING UP THE KA2LHO HAM HELPER SERIES. THE PROGRAMS WERE DESIGNED TO PUT THE SINCLAIR FAMILY OF COMPUTERS TO WORK IN THE HAM SHACK. FOR MORE INFORMATION ON THE COMPLETE SERIES, SEE PAST ISSUES OF QZX OR SEND A BUSINESS SIZE S.A.S.E. TO KRAIG D. PRITTS-KA2LHO, BOX 198, LEONARDSVILLE, NY 13364.

"UTC" CAN BE USED ON ITS OWN AS A UTC TIME CONVERTER OR AS A SUBROUTINE IN A LARGER PROGRAM. IT WILL RUN AS IS IN A 2K MACHINE AND INCLUDES EACH OF THE FOUR CONTINENTAL UNITED STATES TIME ZONES. PROVISION IS MADE FOR STANDARD OR DAYLIGHT SAVINGS TIME AND ALSO FOR A CHOICE OF AM, PM, OR MILITARY INPUT FORMATS.

IF YOU WISH TO CHANGE OR ADD TIME ZONES TO THOSE ALREADY IN THE PROGRAM THE ROUTINE IS IN LINES 105-145. T SHOULD EQUAL T+ (DIFFERENCE IN HOURS BETWEEN TIME ZONE AND GMT * 100).

I URGE YOU TO EXPERIMENT WITH THIS PROGRAM AND IMPROVE UPON IT. HOPEFULLY IT WILL FIND A PLACE IN YOUR HAM SHACK.

```
  1 GOTO 5
  2 LET R$=INKEY$
  3 IF R$="" THEN GOTO 2
  4 RETURN
  5 CLS
 10 PRINT "U.S. TIME ZONE? ";
 15 INPUT Z$
 20 PRINT Z$
 25 PRINT ,,"■TANDARD OR ■AYLIG
HT SAVINGS? ";
 30 INPUT S$
 35 PRINT S$
 37 CLS
 40 PRINT ,,"LOCAL TIME? ";
 45 INPUT T$
 50 PRINT T$
 55 PRINT ,,"■M, ■M, OR ■ILITAR
Y FORMAT? ";
 60 INPUT F$
 65 PRINT F$
 70 LET T=VAL T$
 75 IF F$="P" THEN LET T=VAL T$
+1200
 80 FOR Z=1 TO 25
 85 NEXT Z
105 IF Z$="PACIFIC" AND S$="S"
THEN LET T=T+800
110 IF Z$="PACIFIC" AND S$="D"
THEN LET T=T+700
115 IF Z$="MOUNTAIN" AND S$="S"
 THEN LET T=T+700
120 IF Z$="MOUNTAIN" AND S$="D"
 THEN LET T=T+600
125 IF Z$="CENTRAL" AND S$="S"
THEN LET T=T+600
130 IF Z$="CENTRAL" AND S$="D"
THEN LET T=T+500
135 IF Z$="EASTERN" AND S$="S"
THEN LET T=T+500
140 IF Z$="EASTERN" AND S$="D"
THEN LET T=T+400
145 IF T>2359 AND T<2500 THEN L
ET X=1
150 IF T>=2500 THEN LET X=0
155 IF T>=2400 THEN LET T=T-240
0
```

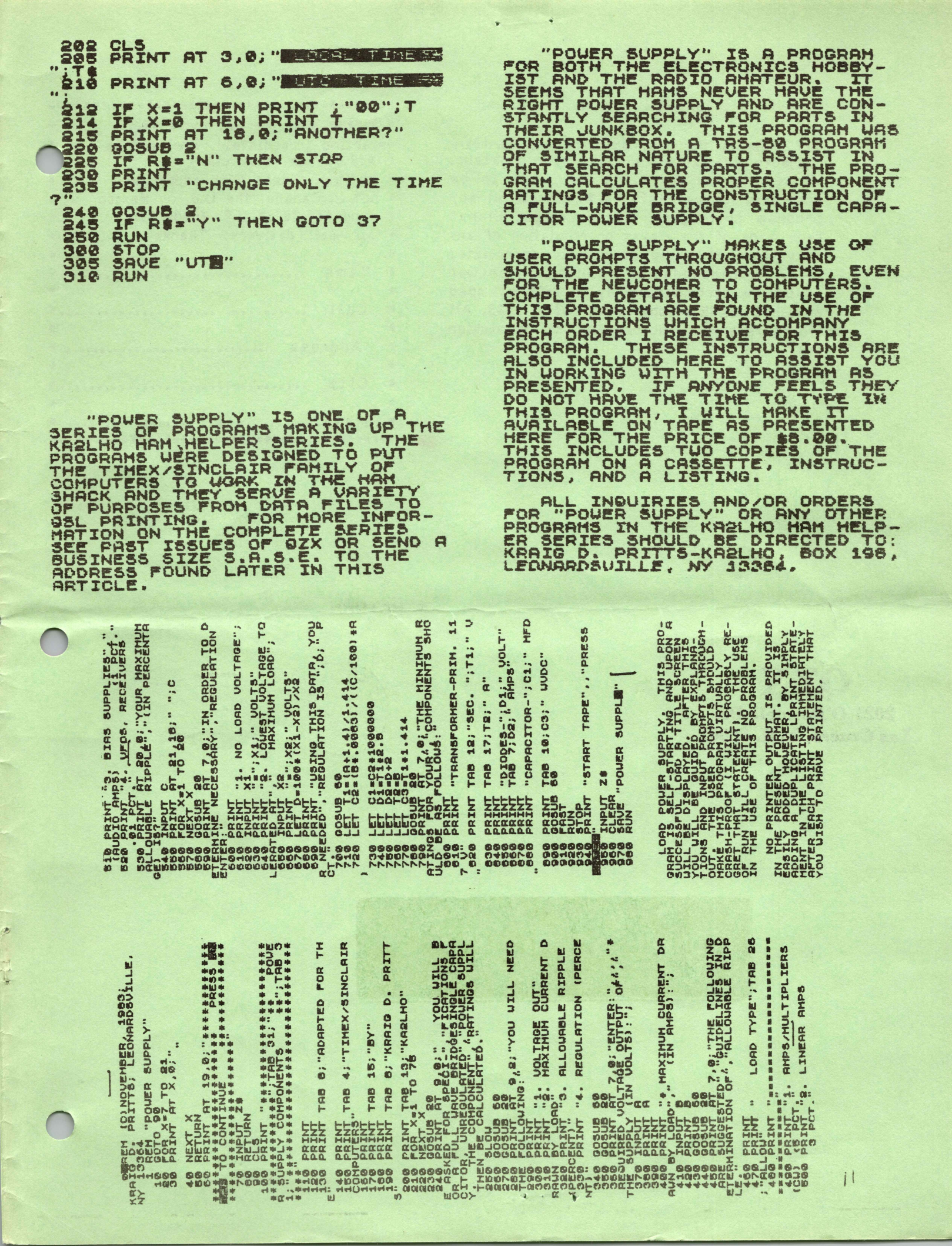
```
 200 CLS
 205 PRINT AT 3,0;"[illegible] TIME ";T$
 210 PRINT AT 6,0;"[illegible] TIME ";T$
 212 IF X=1 THEN PRINT ;"00";T
 214 IF X=0 THEN PRINT T
 215 PRINT AT 18,0;"ANOTHER?"
 220 GOSUB 2
 225 IF R$="N" THEN STOP
 230 PRINT
 235 PRINT "CHANGE ONLY THE TIME"
 240 GOSUB 2
 245 IF R$="Y" THEN GOTO 37
 250 RUN
 300 STOP
 305 SAVE "UT[illegible]"
 310 RUN
```

"POWER SUPPLY" IS ONE OF A SERIES OF PROGRAMS MAKING UP THE KA2LHO HAM HELPER SERIES. THE PROGRAMS WERE DESIGNED TO PUT THE TIMEX/SINCLAIR FAMILY OF COMPUTERS TO WORK IN THE HAM SHACK AND THEY SERVE A VARIETY OF PURPOSES FROM DATA FILES TO 05L PRINTING. FOR MORE INFORMATION ON THE COMPLETE SERIES SEE PAST ISSUES OF 0ZX OR SEND A BUSINESS SIZE S.A.S.E. TO THE ADDRESS FOUND LATER IN THIS ARTICLE.

"POWER SUPPLY" IS A PROGRAM FOR BOTH THE ELECTRONICS HOBBYIST AND THE RADIO AMATEUR. IT SEEMS THAT HAMS NEVER HAVE THE RIGHT POWER SUPPLY AND ARE CONSTANTLY SEARCHING FOR PARTS IN THEIR JUNKBOX. THIS PROGRAM WAS CONVERTED FROM A TRS-80 PROGRAM OF SIMILAR NATURE TO ASSIST IN THAT SEARCH FOR PARTS. THE PROGRAM CALCULATES PROPER COMPONENT RATINGS FOR THE CONSTRUCTION OF A FULL-WAVE BRIDGE, SINGLE CAPACITOR POWER SUPPLY.

"POWER SUPPLY" MAKES USE OF USER PROMPTS THROUGHOUT AND SHOULD PRESENT NO PROBLEMS, EVEN FOR THE NEWCOMER TO COMPUTERS. COMPLETE DETAILS IN THE USE OF THIS PROGRAM ARE FOUND IN THE INSTRUCTIONS WHICH ACCOMPANY EACH ORDER I RECEIVE FOR THIS PROGRAM. THESE INSTRUCTIONS ARE ALSO INCLUDED HERE TO ASSIST YOU IN WORKING WITH THE PROGRAM AS PRESENTED. IF ANYONE FEELS THEY DO NOT HAVE THE TIME TO TYPE IN THIS PROGRAM, I WILL MAKE IT AVAILABLE ON TAPE AS PRESENTED HERE FOR THE PRICE OF $8.00. THIS INCLUDES TWO COPIES OF THE PROGRAM ON A CASSETTE, INSTRUCTIONS, AND A LISTING.

ALL INQUIRIES AND/OR ORDERS FOR "POWER SUPPLY" OR ANY OTHER PROGRAMS IN THE KA2LHO HAM HELPER SERIES SHOULD BE DIRECTED TO: KRAIG D. PRITTS-KA2LHO, BOX 198, LEONARDSVILLE, NY 13364.



73, W4GHV and K5XY

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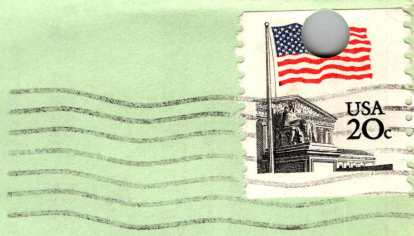

Tom Arbster ***** =03/84
Box 477
Bethany, Okla.
73008